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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,950	09/25/2003	R. Eric Montgomery	P1087US02	7057
53096 7590 06/14/2007 DISCUS DENTAL IMPRESSIONS, INC. 8550 HIGUERA STREET CULVER CITY, CA 90232			EXAMINER BUMGARNER, MELBA N	
			ART UNIT	PAPER NUMBER
			3732	
			MAIL DATE	DELIVERY MODE
			06/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/670,950

Applicant(s)

MONGTOMERY, R. ERIC

Examiner

Melba Bumgarner

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-20,25-42 and 51-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-20,25-42 and 51-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/2/07</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 29 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not describe the mechanical piston at least partially disposed within the reservoir and advancing the mechanical piston into the reservoir.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18-20 and 25-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 contains an improper Markush expression. In claims 25 and 27, it is unclear whether the push button is the push button click mechanism or in addition to other mechanism. In claims 26, 28, and 30, it is unclear whether the twist mechanism is the twist and ratchet mechanism or in addition to other mechanism.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 18, 25, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Green (5,829,976). Green discloses a therapeutic dental delivery device comprising a liquid oral therapeutic dental composition (column 1 line 67), an applicator of a brush (column 1 line 14), an activator 32 coupled to the applicator of a push button mechanism and a reservoir 30 located between the applicator and configured to store the composition, a cap 14 having an open end terminating at a position between the activator and the applicator, the activator is configured to dispense the composition from the reservoir to the applicator. The intended use of the composition after dispensing from the device does not impose any further structural limitation on the device and is given little patentable weight, the composition is capable of increasing viscosity such as through drying. The reservoir is confined within a removable cartridge (column 4 line 8). The device is made of plastic. The non-woven tufted tip of Green could be called a felt tip.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18, 25, 26, 29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grace (1,362,937) in view of Marx (1,041,315). Grace discloses a therapeutic dental delivery device comprising a dental composition (page 1 line 50), an applicator 30 of a brush, an activator coupled to the applicator of a twist mechanism and a reservoir 26 located between the

applicator and the activator and configured to store the composition, the activator is configured to dispense the composition from the reservoir to the applicator; however, Grace does not show a cap. Marx teaches a dental device comprising a cap for covering the applicator having an open end. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the device with the cap of Marx in order to protect the brush from dust and impurities in view of Marx. It would have been obvious to one of ordinary skill in the art made as to the specific activator, since interchanging of twist mechanism in the device with a push button involves only routine skill in the art and Grace suggests other mechanical embodiments. Grace shows the reservoir is confined within a removable cartridge.

9. Claims 19, 20, 27, 29, 30, 32, 34-37, 42, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green in view of Matthews et al. (2003/0232310). Green discloses a device that shows the limitations as described above; however, Green does not show the composition. Matthews et al. teach a device comprising a liquid oral therapeutic dental composition comprising a moisture sensitive polymer complex and a water soluble salt and hydrogen peroxide or carbamide peroxide [0020]-[0022]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Green to have the composition of Matthews et al. in order to whiten or bleach one or more teeth. Green shows the reservoir is confined within a removable cartridge (column 4 line 8). Green shows the device at least in part made from thermoplastic material (column 4 line 22). The reservoir is located in a body section, the cap is in frictional engagement with the body. It would have been an obvious matter of choice to one of ordinary skill in the art to have a retractable applicator in lieu of a cap in order to cover the applicator. Matthews et al. teach having instructions in order

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to show how to use the composition. It would have been obvious to one of ordinary skill in the art as to the intended use of the composition as it comprises the carrier and agent as claimed.

10. Claims 19, 20, 34-37, 42, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grace in view of Marx and further in view of Matthews et al. The modified device discloses a device that shows the limitations as described above; however, they do not show the composition. Matthews et al. teach a device comprising a liquid oral therapeutic dental composition comprising a moisture sensitive polymer complex and a water soluble salt and hydrogen peroxide or carbamide peroxide [0020]-[0022]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device to have the composition of Matthews et al. in order to whiten or bleach one or more teeth.

Matthews et al. teach having instructions in order to show how to use the composition.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grace in view of Marx and further in view of Dragan (6,929,475). The modified device discloses a device that shows the limitations as described above; however, they do not show plurality of bristles aligned generally parallel with lengthwise direction of the device. Dragan teaches a dental device comprising an applicator with plurality of bristles 246 aligned generally parallel with lengthwise direction of the device the composition. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the device to have the applicator of Dragan in order to apply material between teeth and to gum at base of the teeth in view of Dragan.

12. Claims 33, 38-41, and 53-58 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Green or Grace and Marx in view of Matthews et al. and further in view of Fischer et al.

(6,083,489). The modified device shows the limitations as described above; however, they do not show gel carrier polymer including polyvinylpyrrolidone. Fischer et al. teach carrier including carboxypolymethylene and polyvinylpyrrolidone (column 8 line 20). It would have been obvious to one having ordinary skill in the art to further modify the device to include the thickener of Fischer et al. to provide bulk and suitable consistency to the carrier in view of Fischer et al. Fischer et al. show a polysaccharide polymer of xanthan gum, it would have been obvious to one of ordinary skill in the art to have a polymer of gellan gum.

### ***Drawings***

13. The drawings are objected to under 37 CFR 1.83(a). New figure 9 is objected to for containing boundary of reservoir and piston not disclosed in the specification. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Response to Arguments***

14. Applicant's arguments filed October 23, 2006 have been fully considered but they are not persuasive. The prior art alone or in combination show the structural limitations as claimed. Applicant's response with respect to Green details the design of the tip and reservoir pump and removable cartridge that are irrelevant to the broadly claimed structure of applicator of a brush, felt tip or roller ball and reservoir in the device and configured to store the composition. It is noted that the specification states that the delivery devices of such types are known in the art (page 17) and that the dental composition can be dispensed from any suitable delivery device (page 18). Applicant's response with respect to Grace details the design of the twist mechanism that is irrelevant to the broadly claimed structure of applicator of brush and activator coupled to the applicator and a twist mechanism. It appears like the applicant is arguing that the prior art show more than what is claimed. The secondary reference of Marx is used to show the cap that is lacking in Grace. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Matthews et al. is used to show the composition that is lacking in Green and Grace, the device of a wand that the applicant argues is not used in the rejection. Dragan is used to show the orientation of bristles, the dental material disposed on the device is not used in the rejection. Fischer et al. is used to show the thickeners, the composition comprising other material such as abrasives is not used in the




rejection. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (for example, the properties of the moisture or temperature responsiveness) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriquez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melba Bumgarner  
Primary Examiner